

The Role of Physicians in Children's Oral Health

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INTRODUCTION

Twenty-five state Medicaid programs reimburse primary care physicians for performing basic preventive oral health care on young children during regular office visits, an approach that began in North Carolina nearly 10 years ago. Two recent surveys by The National Academy for State Health Policy (NASHP), the Medicaid/SCHIP Dental Association, and the American Academy of Pediatrics detail the extent and characteristics of these programs. States most often reimburse for application of fluoride varnish, which helps prevent cavities; some states also reimburse separately for additional services such as risk assessments, oral exams, and anticipatory guidance.^{1*}

Although Medicaid entitles children to medically necessary dental care under the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit, many children do not see a dentist until age 3 or later – even though cavity risk factors can be well established before a child's first birthday and before the first tooth erupts. More than 40 percent of children experience some form of tooth decay before reaching kindergarten.¹ Through fluoride varnish programs, policy makers seek to take advantage of children's early and frequent visits to physicians. By encouraging the

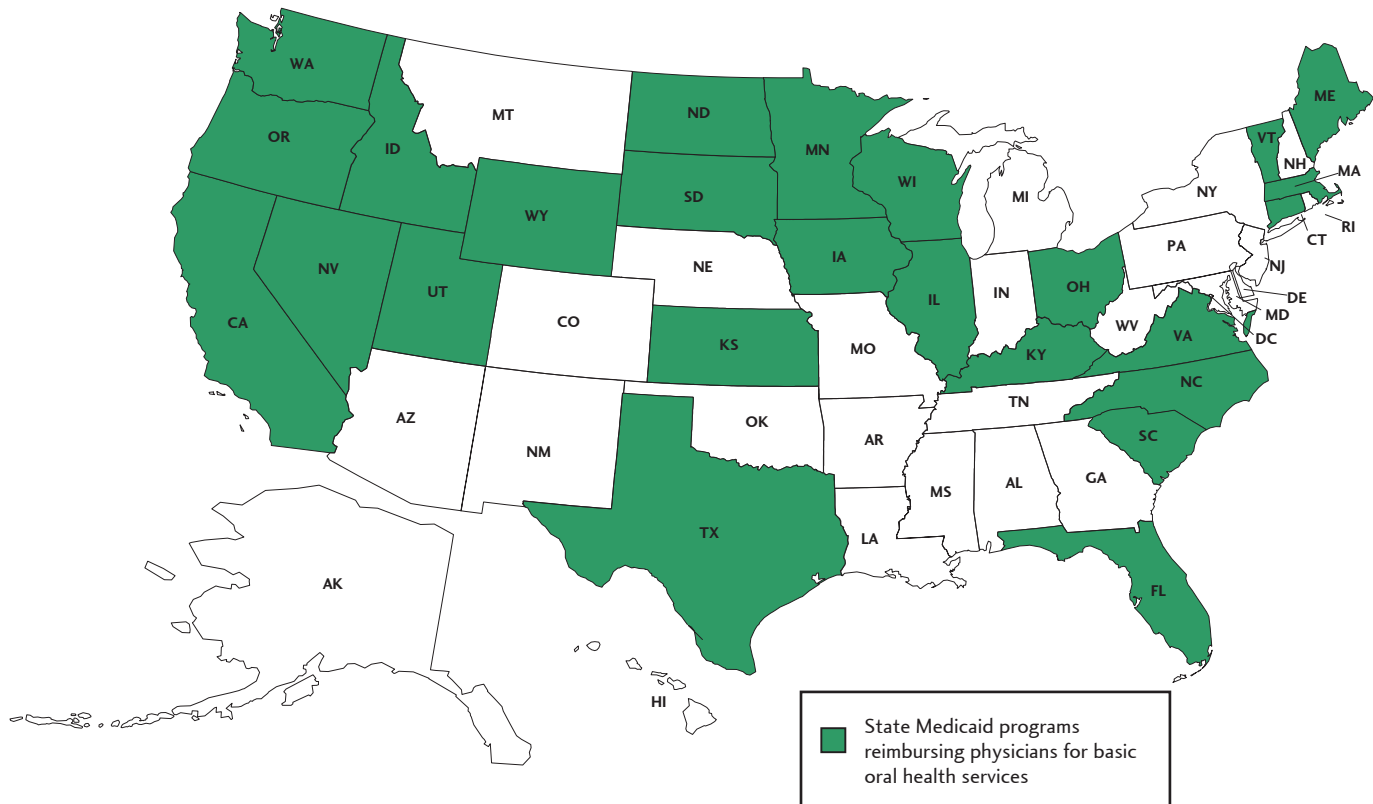
dental and medical communities to share responsibility for children's oral health, policy makers hope to decrease the startling rate of caries in low-income children, who disproportionately bear the burden of dental disease.

ORAL HEALTH CARE MUST BEGIN IN CHILDHOOD

Dental disease is the most common chronic disease among children in the United States.² It is the result of a bacterial infection that is most often passed from mother to child by the time the first tooth erupts (between 9 months and 1 year). Despite Medicaid's inclusion of dental coverage for young children under EPSDT and recommendations by the American Academy of Pediatric Dentistry that a child see a dentist no later than age 1, only 25.1 percent of children younger than 6 see a dentist.^{3,4} The burden of dental disease falls disproportionately on low-income children, who are five times more likely to have cavities than children in higher-income families.⁵

Because dental disease is largely preventable, the consequences of a lack of oral health care are often unnecessary.⁶ Untreated dental disease can lead to

^{1*} Anticipatory guidance refers to face-to-face parent/caregiver education about proper oral health practices, including counseling for important developmental milestones.

FIGURE 1: 25 STATE MEDICAID PROGRAMS REIMBURSE PHYSICIANS FOR BASIC ORAL HEALTH SERVICES

dietary problems, infection, missed school days, and a lower quality of life. The high cost of hospitalization makes the consequences of untreated dental decay burdensome on low-income families. Since cavities can form soon after the eruption of the first tooth, early preventive oral health care is essential to mitigating the infectious and rapidly progressive dental decay that occurs in high-risk children.^{7,8} Introducing the parents of young children to proper dental care not only helps ensure proper family oral hygiene practices, but can also reduce the need for expensive restorative dental procedures in the future.⁹

PHYSICIANS CAN PLAY A KEY ROLE IN COMBATING DENTAL DISEASE

The early and frequent contact that most young children typically have with physicians presents a unique opportunity to evaluate their oral condition and perform basic preventive services. The American Academy of Pediatrics' Bright Futures guidelines recommend that

children see a physician 11 times by age 2.¹⁰ Since many children have not seen a dentist by this age, the timing and frequency of physician's checkups provide great opportunities to assess the health of a child's mouth, provide appropriate preventive dental services, such as oral examinations and fluoride varnish, and screen children for referrals to dentists when disease is identified. One study found that physicians trained to identify the signs of dental disease were 93 percent accurate in identifying young children with dental disease and referring them to a dental care provider.¹¹ Some states also reimburse nurse practitioners and physician's assistants for performing these services, further expanding the pool of providers available to deliver preventive dental services to young children.

FLUORIDE VARNISH CAN REDUCE CAVITIES

Applying fluoride varnish to the teeth at an early age has been shown to reduce significantly caries in young

children.¹² It can be applied safely as soon as teeth have erupted – much earlier than other preventive measures. Sealants, for example, are usually applied to permanent molars around age 6 or 7. The varnish can be painted on the teeth quickly, making it easy to incorporate into a routine well-child visit in a medical office. Although widely used in Europe for quite some time, fluoride varnish was first approved for use in the United States in the 1990s.¹³

Fluoride varnish works by re-mineralizing teeth that have been weakened by the acid produced by bacteria in the mouth. Reports have stated that fluoride varnish is most effective in preventing caries when applied three or four times annually during the first few years of a child's life.^{14,15} Through a periodic schedule of fluoride varnish application, coupled with greater provider participation in Medicaid, policy makers hope to reduce both the prevalence of caries in young children and the cost of future restorative procedures.

RESULTS FROM RECENT STATE SURVEY

Table 1 provides more detail about the 25 state Medicaid programs that reimburse primary care providers for performing preventive oral health care. Twenty-four state Medicaid programs reimburse for the application of fluoride varnish, with five states also reimbursing for other services, such as oral examinations and risk assessments. Although oral examinations and anticipatory guidance are advised to be part of every well-child visit, some states aim to provide additional incentives by reimbursing for those services separately.

The reimbursement for fluoride varnish applications ranges from \$12 to \$53¹⁶ per application, and states generally limit the number of applications to two or three per year. Most of these states reimburse physicians for providing the service to young children, but some states pay for all children up to age 21. In addition, 20 of the states require that primary care providers undergo some form of training before becoming eligible for oral-services reimbursement.

CONCLUSION

State Medicaid programs that reimburse primary care physicians for providing basic preventive oral health care aim to reduce dental disease by creating a shared

SPOTLIGHT: NORTH CAROLINA'S INTO THE MOUTHS OF BABES PROGRAM

In 2000, North Carolina's Smart Smiles pilot program was expanded statewide and renamed Into the Mouths of Babes (IMB). The program uses Medicaid funding to encourage primary care physicians to perform basic preventive oral health procedures. The IMB procedure consists of three components:

- 1) Risk assessment and oral health evaluation, including referral to a dentist when needed.
- 2) Oral health education and anticipatory guidance for primary caregivers.
- 3) Application of fluoride varnish.

Reimbursement of approximately \$54 is paid only if all three components of the package are provided. Providers must bill two reimbursement codes together on the same date of service to receive reimbursement. This package of services can be reimbursed six times from the first tooth eruption until the child is 3.

IMB has expanded access to preventive dental services for children younger than 3, with more than 100,000 annual visits. A 2007 evaluation of the IMB program found a 39 percent reduction in restorative-treatment needs for anterior (front) teeth in IMB patients who received at least four preventive procedures before age 3. The study also found that the state did not experience a reduction in dental visits for preventative care, indicating that the program was supplementing, rather than replacing, the services of dentists. The impact of the program continues to be monitored to determine whether it produces long-term savings for the state.

responsibility for children's oral health. By providing care that focuses on prevention, states hope to prevent dental decay in young children and decrease their risk of developing oral health problems. Some states, such as North Carolina, are seeing fewer dental caries in their young populations and an increase in the utilization of oral health care services. As many states already have found, battling early childhood dental decay requires the cooperation of both the dental and medical communities.

TABLE 1: REIMBURSEMENTS FOR PHYSICIAN-RENDERED BASIC ORAL HEALTH SERVICES

State	Fluoride Varnish	Oral Exam	Anticipatory Guidance	Risk Assessment	Fluoride Varnish Rate	Age Limit	Is training required?	Max. # of Varnishes Reimbursed Per Year
California	✓				\$18	≤ 6 yrs	No	3
Connecticut	✓	✓		✓	TBD	≤ 40 months	Yes	At each well-child exam
Florida	✓				\$27	6 to 42 months	No	4
Idaho	✓				\$13.58	21 yrs	Yes	2
Illinois	✓				\$26	< 3 yrs	Yes	3
Iowa	✓				\$14.41	≤ 3 yrs	Yes	3
Kansas	✓				\$17	None	Yes*	3 (MD) + 3 (DDS) = 6/yr
Kentucky	✓				\$15	1 to 5 yrs	Yes	2
Maine	✓				\$12	≤ 21 yrs	No	3
Massachusetts	✓				TBD	≤ 20 yrs	Yes	2
Minnesota	✓				\$14	None	Yes	No limit
Nevada	✓	✓			\$53.30	≤ 20 yrs	Yes	2
North Carolina	✓	✓	✓	✓	\$16.80	≤ 42 months	Yes	6 total over age range
North Dakota	✓				\$18.68	0 to 21 yrs	Yes	2
Ohio	✓				\$14.70	≤ 3 yrs	Yes	2
Oregon	✓				\$13.19	≤ 6 yrs	No	4
South Carolina	✓				\$17.06	≤ 3 yrs	Yes	2 (MD) + 2 (DDS) = 4/yr
South Dakota	✓				\$18	≤ 5 yrs	No	3
Texas	✓				\$34.16	6 to 35 months	Yes*	6 total over age range
Utah	✓				\$15	≤ 4 yrs	Yes	At each well-child exam
Vermont		✓	✓	✓	TBD	≤ 2 yrs	Yes	n/a
Virginia	✓				\$20.79	≤ 3 yrs	Yes	2
Washington	✓	✓	✓		\$13.46	≤ 20 yrs	Yes	3
Wisconsin	✓				\$12.76	≤ 12 yrs	Yes	n/a
Wyoming	✓				\$35	≤ 3 yrs	Yes	3
TOTAL:	24	5	3	3				

This summary reflects results obtained from a survey of the 50 states and D.C. performed by Amos Deinard, MD, MPH, on behalf of the Oral Health Initiative, American Academy of Pediatrics, Medicaid/SCHIP Dental Association and Chris Cantrell, et al. of the National Academy for State Health Policy.

Unchecked services may be reimbursed as part of a well-child visit.

TBD: To be decided.

*Depends on state licensing boards.

%Training is required for CMAs, LPNs and RNs.

NOTES

- 1 Kate M. Pierce, R. Gary Rozier, William F. Vann, Jr. "Accuracy of Pediatric Primary Care Providers' Screening and Referral for Early Childhood Caries," *Pediatrics* 109(5): 1-2, May 2002.
- 2 B.L. Edelstein, "Dental Care Considerations for Young Children," *Spec Care Dentist* 22(3 Suppl): 11S-25S, 2002.
- 3 Department of Health and Human Services, Guide To Children's Dental Care In Medicaid, October 2004.
- 4 Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services. Medical Expenditure Panel Survey No. 17. http://www.meps.ahrq.gov/mepsweb/data_files/publications/cb17/cb17.pdf. Accessed 4 November 2008.
- 5 B.L. Edelstein, "Dental Care Considerations for Young Children," 11S-25S.
- 6 Ibid.
- 7 Ray E. Stewart, Kevin J. Hale, "The Paradigm Shift in the Etiology, Prevention, and Management of Dental Caries: Its Effect on the Practice of Clinical Dentistry," *Journal of the California Dental Association*, (March 2003).
- 8 James D. Bader, Paul S. Frame, Kathleen N. Lohr, Gary R. Rozier, "Physicians' Roles in Preventing Dental Caries in Preschool Children," *American Journal of Preventive Medicine* 26(4): 315-316, 2004.
- 9 D.M. O'Sullivan, N. Tinanoff, "The Association of Early Dental Caries Patterns with Caries Incidence in Preschool Children. *J Public Health Dent* 56: 81-3, 1996.
- 10 Bright Futures Third Edition, American Academy of Pediatrics, "Recommendations for Preventive Pediatric Health care."
- 11 Kate M. Pierce, R. Gary Rozier, William F. Vann, Jr. "Accuracy of Pediatric Primary Care Providers' Screening and Referral for Early Childhood Caries," *Pediatrics* 2002 109: e82
- 12 J.A. Weintraub, et al., "Fluoride Varnish Efficacy in Preventing Early Childhood Caries," *Journal of Dental Research* 85 (2006): 172-176.
- 13 Kevin Donly, "Fluoride Varnishes," *Journal of the California Dental Association*, (March 2003).
- 14 Weintraub, J.A., et al., IBID.
- 15 Some studies have stated that even more frequent applications increase the level of caries prevention.
- 16 Some states do not separately reimburse for the application of fluoride varnish, but instead require that other services be performed in conjunction with the varnish in order to be reimbursed.

NATIONAL ACADEMY for STATE HEALTH POLICY

Acknowledgements:

The author would like to thank the Robert Wood Johnson Foundation for its support of this project. In addition, the author also wishes to thank Dr. Conan Davis, Dr. Gary Rozier, Kelly Close, and Dr. Bob Isman for their assistance. Special thanks to Dr. Amos Deinard of the University of Minnesota, Andy Snyder of the Pew Center on the States, and Sonya Schwartz and Alan Weil of the National Academy for State Health Policy for their contributions to the survey data and the manuscript.

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Citation:

Chris Cantrell, "The Role of Physicians in Children's Oral Health," *State Health Policy Monitor*, Vol. 2, Issue 5 (Portland, ME: National Academy for State Health Policy, December 2008).

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